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# PHMSA Organization and Regulatory Overview



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# Contact Information

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# PHMSA's Mission Statement

To ensure the **safe, reliable,**  
and **environmentally sound**  
operation of the nation's  
pipeline transportation system.



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# DOT Reorganization

**PHMSA** = Pipelines and Hazardous  
Materials Safety  
Administration

**OPS** = Office of Pipeline Safety

**TQ** = Training and Qualifications



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# DOT Reorganization

**NTSB**

***FMCSA***

***FRA***

***MARAD***

***FAA***

***NHTSA***

***RITA***

***PHMSA***

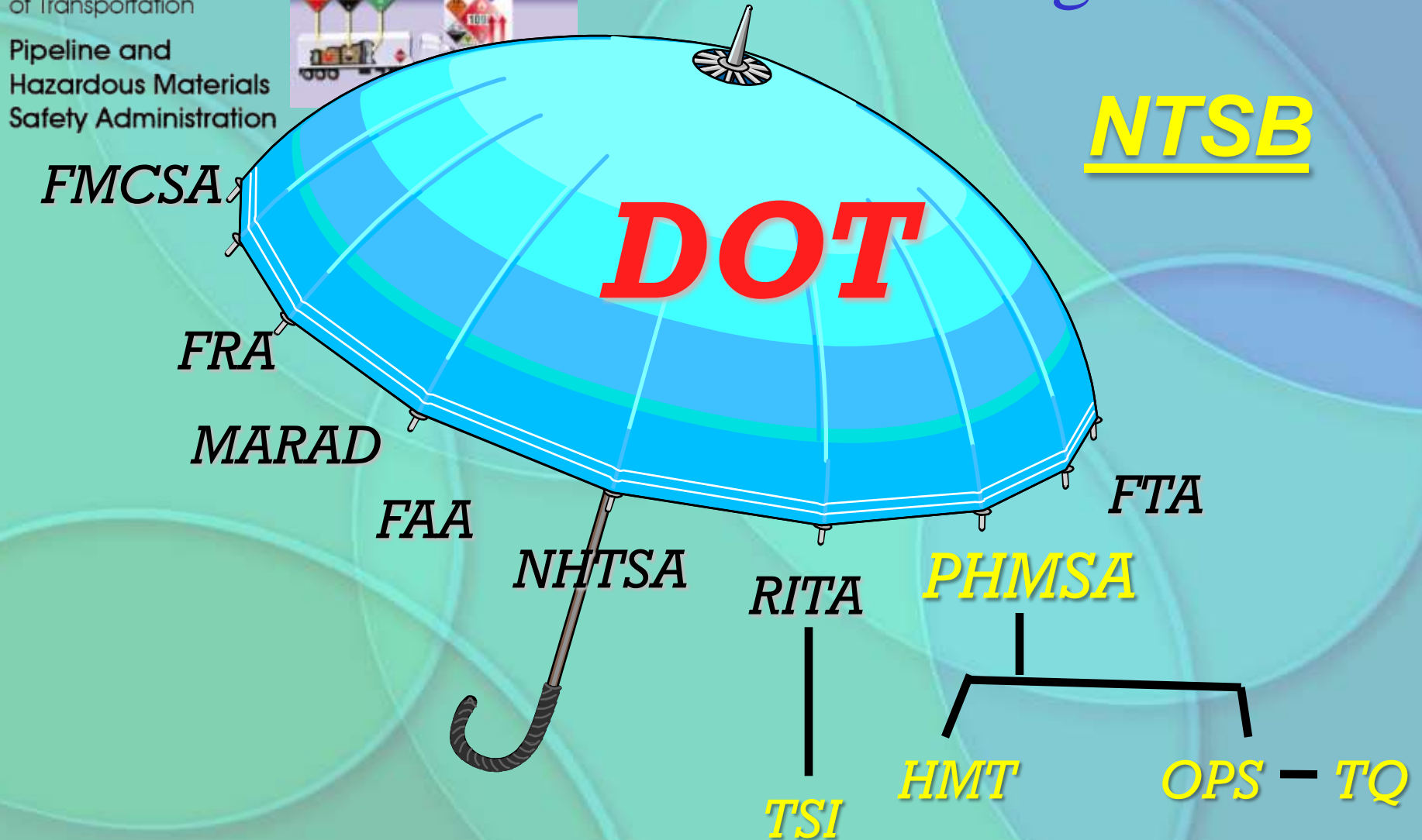
***FTA***

***TSI***

***HMT***

***OPS - TQ***

***DOT***







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# PHMSA Regional Offices





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# PHMSA Office of Training and Qualifications

## Providing Training For:

- ◆ State and Federal Pipeline Inspectors  
(Courses in OKC)
- ◆ Industry Personnel via Seminars





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# PHMSA

## *Pipeline Safety*

- ◆ Strategic Plans & Assessment
- ◆ Technology & Standards
- ◆ Monitoring State Programs
- ◆ Compliance





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# State Programs

## Section 60105

## State Certifications

### ◆ Adopted:

- ▲ Federal Pipeline Safety Regulations  
as a Minimum
- ▲ Enforcement Authority

*Pipeline Safety Law*





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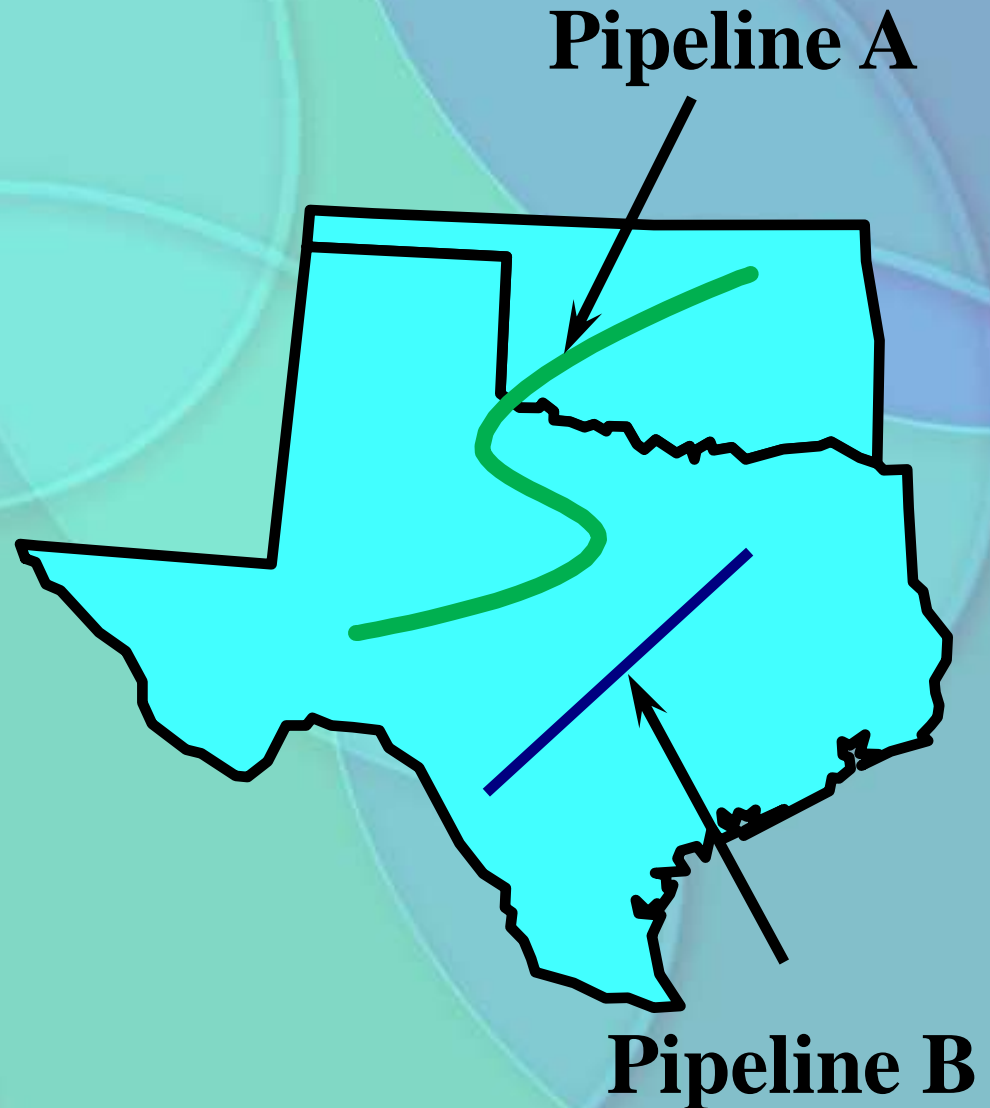
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# Pipeline Jurisdictions

◆ Interstate  
(Federal)

◆ Intrastate  
(State)





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# Compliance Section 60118

## ◆ Operator Shall:

- **Comply with Applicable Safety Standards**
- **Prepare and Follow an O&M Plan**
- **Maintain Records Required by the Safety Standards**

*Pipeline Safety Law*



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# Strategic Initiatives to Improve Pipeline Safety

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# Strategic Focus

- Improve the safety of the Nation's pipelines
  - Reduce the number of serious incidents causing death & injury
  - Reduce the likelihood of any incidents in high consequence areas
  - Reduce the potential for hazardous liquids spills into unusually sensitive areas
- Provide the basis for increased public confidence in pipeline safety



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# Pipeline Safety Mission

- Hazardous Liquid Pipelines 186,000 miles
- Natural Gas Transmission 306,000 miles
- Gas Distribution Pipelines 1.2 million miles
- Liquefied Natural Gas (LNG) 108 Facilities



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# Pipeline Safety Challenges



- **March 23, 1994, Edison, NJ**
- 30" Natural gas transmission line operating at 970 psig ruptured
- Force of escaping gas excavated area around pipe and gas ignited
- Several apartment buildings burned
- Investigation found "teeth marks" on pipeline
- Crushed Ford Ranger pick-up truck excavated near rupture



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# Pipeline Safety Challenges

- **June 10, 1999, Bellingham, WA**
- 16" Gasoline pipeline leaked into a creek in a city park and stretched for 1.5 miles
- 1.5 hours after leak started, gasoline ignited
- 3 fatalities, 8 injuries
- \$45 million in property damage
- Leak caused by damage to pipeline during 1994 water treatment plant construction







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# Pipeline Safety Challenges

- **August 19, 2000, Carlsbad New Mexico**
- 30'' Natural gas transmission line ruptured, ignited, and burned, for 55 minutes
- 12 people who were camping near the pipeline failure site were killed
- Adjacent pipeline equipment was heavily damaged and three vehicles destroyed
- Property and other losses totaled approx. \$998,296
- Investigation found significant pipe wall loss due to internal corrosion



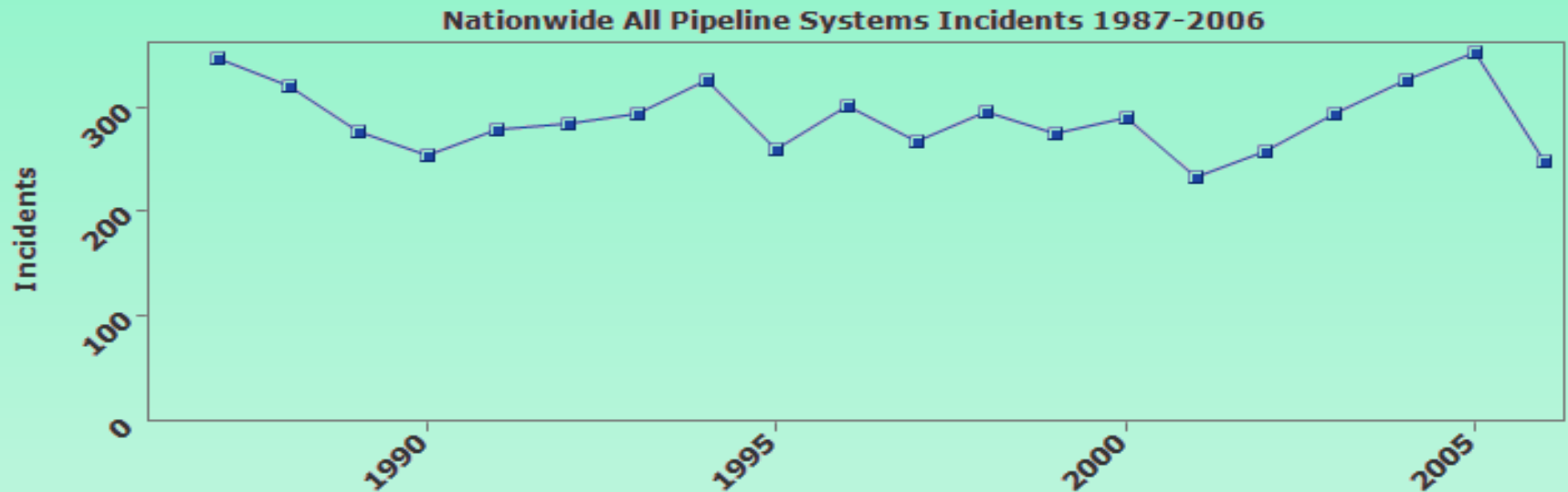
# Good News on Serious Incidents

## Serious Pipeline Incidents Involving Death or Injury (1998-2007)

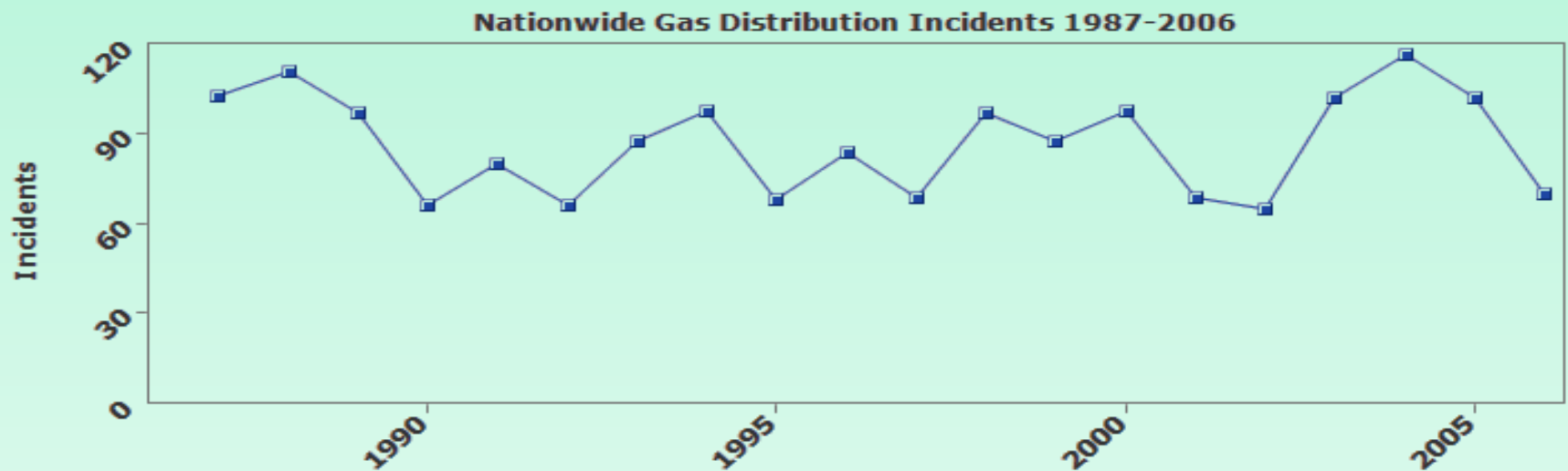


Source: DOT/PHMSA Incident Data, as of Dec. 21, 2007

# Significant Incidents Rather Flat



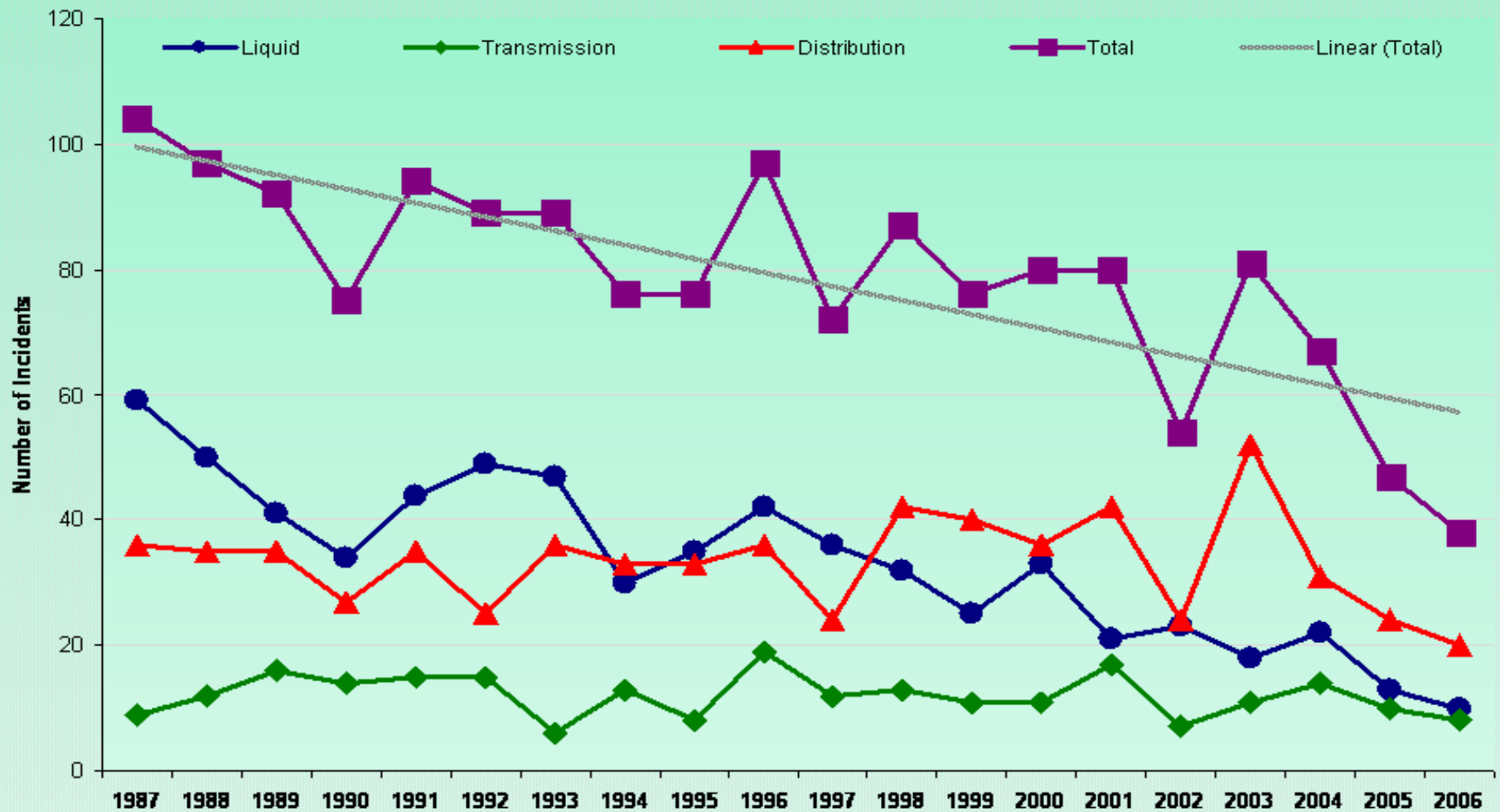
*PHMSA Significant Incidents Files March 14, 2007*



*PHMSA Significant Incidents Files March 14, 2007*

# Excavation Caused Damages Declining

**Significant Pipeline Incidents Caused By Excavation Damage**



Data as of 03/21/2007





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# Data Driven Organization

- More focus on root cause analysis of incidents
- Integration of inspection findings across regions
- Recently, significantly improved availability of information through OPS web site:



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# Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (PIPES)



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# PIPES Themes

- Damage Prevention
- Managing System Risk – Integrity Management
- Infrastructure, People, and Procedures, integrated to attain performance
- “Prevention through People”  
Operator Qualification for damage prevention tasks



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# The PIPES Agenda

- Create a national focus on the importance of Damage Prevention Programs
- “Aspirational Model” of federal one-call enforcement to encourage States to develop adequate enforcement
- Foster damage prevention improvements in States through new grant program & identifying essential elements
- Increased support for our State Partners





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# What is an Enterprise Approach?

- CGA is the Model - gather all Stakeholders
- At the conceptual stage all views sought
- Everyone has an Equal Voice
- Solution is Consensus
- We're not done till all Needs are met
- PHMSA uses Enterprise Approach as Central Value



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# Key Words in 9 Essential Elements

- Communication
- Partnership
- Training
- Education
- Performance Measures
- Fair and Consistent Enforcement
- Technology
- Data Analysis





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# Transmission Pipeline and Land Use Planning

- Assembling Enterprise of Stakeholders representing:
  - Property Developers
  - Local Governments
  - Pipeline Industry
- Identify Best Practices for property development adjacent to Gas Transmission and Liquid pipelines
- Make these practices available to local government planners to guide property development



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# Possible Criteria for One-Call Enforcement Adequacy

- Process for receiving reports of potential violations from all stakeholders
- Jurisdiction over all damage prevention stakeholders
- Personnel resources for investigating reports
- Tiered financial penalty structure with enhanced education alternatives
- Metrics (Data Tracking & Analysis)
- Transparency





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# Civil One-Call Enforcement Authority

- PHMSA can only exercise enforcement authority if the State's enforcement program is “inadequate to protect safety”
- Criteria to determine that a State's enforcement is “inadequate” must be established by Rulemaking
- OPS will start with ANPRM that asks questions to solicit input from the Enterprise
- Criteria will be developed to guide States in developing enforcement authority



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# Increased State Grant Funding

- Authorized funding from 50% up to 80%
- Plan for 5% Incremental Increase Per year
- Working with NAPSAR on Criteria for Eligibility
- Focus on Meeting Statutory Mandates & Harmonizing Risk Based Approach with State Partners



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# Damage Prevention Technology Grants

- Solicit creative ideas from universities
- Develop new technologies for preventing pipeline damage
- Focus on notification systems and underground facility locating and marking
- “Job Site of the Future” – enhance image of contractor career in universities



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# 811 Campaign Funding

- Recognition of the 811 campaign in federal law
- Single donation directly to the Common Ground Alliance, Not multiple grants to State or Regional groups
- National campaign kick-off held May 1, 2007 in Washington DC included DOT Secretary Mary Peters



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# Hits and 911

## Common Ground Alliance Best Practices

- If excavator damages pipeline and product is released, the excavator is required to call 911
- CGA BP 5-25 call 911 and pipeline operator
- Operators who hit their own pipeline and cause a leak are required to call 911
- Driven by need for improved incident perimeter control for public safety

<http://www.commongroundalliance.com>





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# SCADA Standards

- Operator implementation of NTSB Recommendations related to Supervisory Controls and Data Acquisition (SCADA) systems
  - Use of standardized graphics
  - Review and audit of alarms on monitoring equipment
  - Pipeline controller training



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# Control Room Management

- Operator develops human factors management plan, including maximum hours of service limits for controllers
- Workshop held in 2006 and on May 23, 2007.
- Considering appending this newly required plan to the IMP plan
- Prevention Through People



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# Enforcement Transparency

- New Website will display Enforcement data
- Statistical summaries starting in 2002
- Enforcement documents from 2007 onward
  - Initial OPS Letter
  - Operator Response (optional)
  - Final OPS Letter
- Meeting with Stakeholders to review and make adjustments before launching Website



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# PHMSA Rule Update



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# Advisory Bulletin No. ADB-08-01

Issued May 7, 2008

## Pipeline Safety: Natural Gas Transmission Operators

- This document advises operators of gas transmission lines that the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 has eliminated the former exception of direct sales natural gas pipelines from the definition of an interstate gas pipeline facility.
- As a result, direct sales gas transmission pipelines subject to FERC jurisdiction (formerly considered to be intrastate pipelines), are now subject to PHMSA regulatory oversight and inspection.





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Advisory Bulletin No.

ADB-08-04

Issued May 30, 2008

## Pipeline Safety: Natural Gas Distribution Operators

- This document advises operators of gas distribution pipeline systems of a statutory requirement for the installation of excess flow valves in certain gas service lines.
- The PIPES Act of 2006 instructed PHMSA to write regulations requiring operators of gas distribution systems to install excess flow valves as close as possible to the main, on select service lines installed after June 1, 2008. PHMSA will include this requirement in the upcoming Distribution Integrity Management (DIMP) rule.



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# Advisory Bulletin No. ADB-08-07

Issued July 24, 2008

## Pipeline Safety: Natural Gas Distribution, Transmission, and LNG Operators

- Beginning on January 1, 2009, PHMSA is requesting that operators submit their NPMS data concurrently with hazardous liquid and gas transmission annual report submissions.
- PHMSA suggests that beginning on January 1, 2009, gas transmission NPMS submissions be submitted by March 15, 2009, and represent the pipeline operator assets as of December 31, 2008. LNG plant operators would also submit to NPMS by March 15, 2009, representing assets as of December 31, 2008.



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# Advisory Bulletin No. ADB-08-07

Issued July 24, 2008

## Pipeline Safety: Natural Gas Distribution, Transmission, and LNG Operators

- Hazardous liquid annual reports and NPMS submissions would both be submitted by June 15, 2009, representing assets as of December 31, 2008. In 2010 and beyond, the annual report and NPMS submission due dates would remain March 15 for gas transmission and LNG plants and June 15 for hazardous liquid pipelines.
- NPMS submissions would represent physical assets as of December 31 of the previous year.





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NPRM Issued January 8, 2008  
49 CFR Part 192  
Docket ID: PHMSA-2005-21305  
Pipeline Safety: Polyamide 11  
(PA-11) Plastic Pipe Design  
Pressures

- **Polyamide PA-11:** Would allow certain thermoplastic pipelines made from new Polyamide-11 (PA-11) pipe, to operate at a higher design pressure limit.
- Would raise the design factor from 0.32 to 0.40, and raise the design pressure limit from 125 PSIG to 200 PSIG Max. for certain types of PA-11 only.

(The draft Supplemental NPRM on Polyamide-11 (PA-11) Plastic Pipe Design Pressures was submitted to PHMSA HQ on June 23, 2008)



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NPRM Issued June 25, 2008

49 CFR Part 192

Docket ID: PHMSA-2004-19854

## Pipeline Safety: Integrity Management Program for Gas Distribution Pipelines

- **Distribution Integrity Management:** Would require operators of natural gas distribution systems to install excess flow valves on certain single feed service lines, and to develop an integrity management plan for their gas distribution pipeline systems.

(NPRM on June 25, 2008, comment period closed October 23, 2008)





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# NPRM Issued September 12, 2008

## 49 CFR Part 192 , 193, 195

### Docket ID: PHMSA-2007-27954

## Pipeline Safety: Control Room Management/Human Factors

- **Control Room Management:** Would require operators of natural gas, LNG facilities, and hazardous liquids pipelines to amend their existing written operation and maintenance procedures, OQ programs, and emergency plans to assure controllers and control room management practices and procedures used maintain pipeline safety and integrity.

(NPRM on September 12, 2008, open for comment until  
November 12, 2008)



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Final Rule Issued October 17, 2008  
49 CFR Part 192

Docket ID: PHMSA-2005-23447

## Pipeline Safety: Standards for Increasing the Maximum Allowable Operating Pressure for Gas Transmission Pipelines

- **Increase Maximum Allowable Operating Pressure for Natural Gas Transmission Pipelines:** Would allow an increase of the MAOP design limitation (with certain additional design and operational requirements) for class 1 locations to 80%, class 2 to 67%, and class 3 to 57% of SMYS.

(NPRM March 12, 2008, comments closed May 19, 2008)

**(Effective Date: November 17, 2008)**



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# Challenges for PHMSA in Pipeline Safety

- Public Perception of Unresponsiveness
- Pressures to Perform (Congress, NTSB, IG)
- Growing Economy – Strain to Meet Energy Demand/Pipeline Capacity
- Growing Stakeholder Community (Agencies, Advocates, Local Communities, Citizen Groups)
- Better informed public and stakeholder community
- Improved Public Confidence





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# Information Available from PHMSA

- Latest News
- Training Calendar
- Joint Industry Training
- Operator Qualification
- Resource Links
- Regulatory Information
- Codes
- Pipeline Safety Laws
- Federal Regulatory Information



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# PHMSA Information Websites

## PHMSA Training and Qualification

<http://www.phmsa.dot.gov/pipeline/TQ>

## PHMSA Pipeline Safety Regulations

<http://www.phmsa.dot.gov/pipeline/TQ/Regulations>

## PHMSA Rulemaking

<http://www.phmsa.dot.gov/pipeline/regs/rulemaking>





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# PHMSA Training and Qualifications

*Remember,  
We're with the Government  
and We're Here to Help!*

